

By Casey Cowell

Boomerang — A tale for the future of Traverse City



Casey Cowell is a tech entrepreneur, philanthropist and startup investor. He is a principal of local investment group Boomerang Catapult LLC.

Mike Carey is a "boomerang." He was born in Detroit, grew up in Gaylord, became familiar with Traverse City and loved it. He took off after high school and landed a U.S. Air Force career of 35 years, racking up extensive experience in space vehicle control and communications.

He often thought about living and working in Traverse City, but didn't consider the opportunity seriously. He moved his family here a few years ago, but regularly commuted to Silicon Valley, where he worked.

Post-military, Mike teamed with some fellow space-oriented Air Force veterans to consider how they might participate in the burgeoning commercial satellite marketplace. (His principal partner, Sean McDaniel, is from Mio and Lapeer. I believe he will boomerang back here as well).

The most notable space company has been SpaceX, led by Elon Musk. In 2016 SpaceX landed five rockets and are now moving to reuse rockets, greatly reducing launch costs. While rocket cost reductions have been enormous, even more significant have been the size and cost reductions and tremendous increases in power of commercial satellites — now called "nano" or "cube" sats.

In 2013, 38 such satellites launched. In 2016, 87 were launched. In February 2017, one rocket alone placed 104 satellites in orbit. There are about 2,000 satellites operating in low-Earth orbit today — and their number and power are increasing rapidly.

Why is this important? It provides a tremendous opportunity for data collection, resulting in an incredibly vast amount of information about what is happening on our planet.

Take a look at: boomerangcatapult.com/china-oil-tanks. The image appears to be of 100 tiny disks. In fact, they are oil storage containers in China. Each is gigantic. Each has a floating lid and the angle of the lid varies with the fullness of the container. By converting these photos into numerical information, we can accurately estimate the oil supply and consumption of China.

Think about that. Start to imagine the volume of data these small satellites can gather, and the impact this information is having. The key is to control satellites, test them and monitor their operations ... and get the data back to earth, cleanly compressed and packaged ... and send it through the cloud to analytics customers.

Until ATLAS, there were just three operations centers in the world that could perform the tracking, control and data download of commercial satellites: one in Sweden, one in Norway and one in Asia. Now there is a fourth — ATLAS Space Operations — in Traverse City. And ATLAS is much more technologically advanced and at a lower cost than its competitors.

Space-collected data is growing rapidly. Many of the commercial satellites in orbit will be controlled from the ATLAS Communications Center in Traverse City. Much of the terabytes of data they are ceaselessly capturing and downloading will flow through Traverse City or have

a delivery path defined and managed by the ATLAS Center in Traverse City.

This is a grand slam.

It also may be step one in forging a center of space-related commercial activity right here. Let's file away, "Houston ... we have a problem." New era: "Traverse City ... we have a tremendous opportunity!"

The ATLAS Headquarters and Communications Center was set to be established in Encinitas, outside of San Diego. Mike Carey visited one of our networking meetings here in Traverse City and the conversation focused on the location of their upcoming center:

Us: "If you got the money, would you locate yourself and your business here?"

Mike: "Absolutely."

And that is exactly what happened.

About \$600,000 has come from local investors. Another \$600,000 has come from outside the Traverse City area, much of it from outside Michigan. Significant private invested capital is flowing into Traverse City to support intellectually intensive, creative people right here. That's BIG!

There is no reason that good, investable ideas must come from boomerangs who want to locate here. They may just as well come from people who are already here.

It's happening. I encourage you to plug in and find a way to be involved and support this activity. It is invigorating and this is intellectually driven, true economic development. It is the long-term engine of our area's economic and cultural prosperity. **GTB**